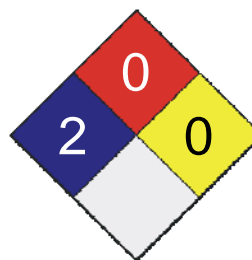


1. Product and Company Identification

Product Name FINISH® Quantum® (Original) and with Baking Soda
CAS # Mixture
Product use Dishwasher detergent
Distributed by Reckitt Benckiser
 Morris Corporate Center IV
 399 Interpace Parkway
 P.O. Box 225
 Parsippany, NJ 07054-0225
 In Case of Emergency: 1-800-338-6167
 Transportation Emergencies: 24 Hour Number:
 North America: CHEMTREC: 1-800-424-9300
 Outside North America: 1-703-527-3887

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 2
Flammability	0
Physical Hazard	0
Personal Protection	B



2. Hazards Identification

Emergency overview CAUTION
 HARMFUL IF SWALLOWED.
 EYE IRRITANT Avoid contact with eyes. DO NOT ingest.
 KEEP OUT OF REACH OF CHILDREN.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.
Eyes Irritating to eyes.
Skin None expected during normal conditions of use.
 Not expected to be a skin sensitizer.
Inhalation None expected during normal conditions of use.
Ingestion Health injuries are not known or expected under normal use.

Target organs Skin. Eyes.

Chronic effects The finished product is not expected to have chronic health effects.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin.

OSHA Regulatory Status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects Components of this product have been identified as having potential environmental concerns.

3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Sodium carbonate	497-19-8	20 - 40
Alcohols, C12-15, ethoxylated propoxylated	68551-13-3	2.5 - 10
Sodium citrate	6132-04-3	2.5 - 10
Sodium percarbonate	15630-89-4	10 - 20
Alpha-D-Glucopyranoside, beta-D-fructofuranosyl	57-50-1	1 - 2.5
Subtilisin carlsburg	9014-01-1	0.1 - 1
Titanium oxide	13463-67-7	0.1 - 1
A-Amylase (EC# 3.2.1.1)	9000-90-2	< 0.1

4. First Aid Measures

First aid procedures

Eye contact	If in eyes, IMMEDIATELY rinse eyes with water. Remove any contact lenses and continue rinsing eyes for at least 15 minutes.
Skin contact	If skin irritation persists, call a physician. Rinse immediately with plenty of water for at least 15 minutes.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	DO NOT INDUCE VOMITING. If swallowed, rinse mouth and drink a glass of water. Call a Physician or Poison Control Center.

Notes to physician

Treat patient symptomatically.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Treat for surrounding material.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of carbon. Oxides of sulphur.
Explosion data	
Sensitivity to mechanical impact	Not available
Sensitivity to static discharge	Not available

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.
Methods for containment	Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice.

7. Handling and Storage

Handling	Ensure adequate ventilation. Avoid contact with eyes. Do not ingest. Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.
Storage	Keep out of reach of children. Store in a closed container away from incompatible materials. Keep container tightly closed in a cool, dry and well-ventilated place. Keep in properly labelled containers. Keep away from direct sunlight. Protect from freezing. Protect from water. Store between 15°C (56°F) and 30°C (86°F).

8. Exposure Controls / Personal Protection

Exposure limits

Ingredient(s)	Exposure Limits
A-Amylase (EC# 3.2.1.1)	ACGIH-TLV Not established OSHA-PEL Not established
Alcohols, C12-15, ethoxylated propoxylated	ACGIH-TLV Not established OSHA-PEL Not established
Alpha-D-Glucopyranoside, beta-D-fructofuranosyl	ACGIH-TLV TWA: 10 mg/m3 OSHA-PEL TWA: 15 mg/m3
Sodium carbonate	ACGIH-TLV Not established OSHA-PEL Not established
Sodium citrate	ACGIH-TLV Not established OSHA-PEL Not established
Sodium percarbonate	ACGIH-TLV Not established OSHA-PEL Not established
Subtilisin carlsburg	ACGIH-TLV Ceiling: 0.0001 mg/m3 OSHA-PEL Not established
Titanium oxide	ACGIH-TLV TWA: 10 mg/m3 OSHA-PEL TWA: 15 mg/m3

Engineering controls

General ventilation normally adequate.

Personal protective equipment**Eye / face protection**

tightly fitting safety goggles
Emergency responders should wear full eye and face protection.

Hand protection

PVC disposable gloves.
Emergency responders should wear impermeable gloves.

Skin and body protection

Usual safety precautions while handling the product will provide adequate protection against injury or irritation.
Follow label directions carefully.
Emergency responders should wear impermeable clothing and footwear when responding to a situation where contact with the liquid is possible.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
Emergency responders should wear self-contained breathing apparatus (SCBA) to avoid inhalation of vapours generated by this product during a spill or other clean-up operations.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.
When using do not eat or drink.
Washing with soap and water after use is recommended as good hygienic practice to prevent possible eye irritation from hand contact.

9. Physical and Chemical Properties

Appearance	Tablet
Color	White / Blue / Red
Form	Liquid gel in a soluble capsule
Odor	Characteristic
Odor threshold	Not available
Physical state	Solid
pH	10.5 (10%)
Freezing point	Not available
Boiling point	Not available
Pour point	Not available
Evaporation rate	Not available
Flash point	> 212.00 °F (> 100 °C)
Auto-ignition temperature	Not available
Flammability limits in air, lower, % by volume	Not applicable
Flammability limits in air, upper, % by volume	Not applicable
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	Not available
Octanol/water coefficient	Not available
Solubility (H₂O)	300 g/L

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	DO NOT MIX WITH BLEACH or use in conjunction with other household products. Extremes of temperature and direct sunlight. Exposure to water or water vapor.
Incompatible materials	Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of carbon. Oxides of sulphur.

11. Toxicological Information

Component analysis - LC50

Ingredient(s)	LC50
A-Amylase (EC# 3.2.1.1)	Not available
Alcohols, C12-15, ethoxylated propoxylated	Not available
Alpha-D-Glucopyranoside, beta-D-fructofuranosyl	Not available
Sodium carbonate	400 mg/m3 guinea pig
Sodium citrate	Not available
Sodium percarbonate	Not available
Subtilisin carlsburg	Not available
Titanium oxide	Not available

Component analysis - Oral LD50

Ingredient(s)	LD50
A-Amylase (EC# 3.2.1.1)	7500 mg/kg rat
Alcohols, C12-15, ethoxylated propoxylated	1200 mg/kg rat
Alpha-D-Glucopyranoside, beta-D-fructofuranosyl	29700 mg/kg rat
Sodium carbonate	4090 mg/kg rat
Sodium citrate	Not available
Sodium percarbonate	2200 mg/kg mouse; 1034 mg/kg rat
Subtilisin carlsburg	Not available
Titanium oxide	24000 mg/kg rat

Effects of acute exposure

Eye	Irritating to eyes.
Skin	None expected during normal conditions of use. Not expected to be a skin sensitizer.
Inhalation	None expected during normal conditions of use.
Ingestion	Health injuries are not known or expected under normal use.
Sensitization	The finished product is not expected to have chronic health effects.
Chronic effects	The finished product is not expected to have chronic health effects.
Carcinogenicity	The finished product is not expected to have chronic health effects.

ACGIH - Threshold Limit Values - Carcinogens

Alpha-D-Glucopyranoside, beta-D-fructofuranosyl	57-50-1	A4 - Not Classifiable as a Human Carcinogen
Titanium oxide	13463-67-7	A4 - Not Classifiable as a Human Carcinogen

IARC - Group 2B (Possibly Carcinogenic to Humans)

Titanium oxide	13463-67-7	Monograph 93 [2010]; Monograph 47 [1989]
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U.S. - California - Proposition 65 - Carcinogens List

Titanium oxide	13463-67-7	carcinogen, initial date 9/2/11 (airborne, unbound particles of respirable size)
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Mutagenicity	The finished product is not expected to have chronic health effects.
Reproductive effects	The finished product is not expected to have chronic health effects.
Teratogenicity	The finished product is not expected to have chronic health effects.
Name of Toxicologically Synergistic Products	Not available

12. Ecological Information

Ecotoxicity See below

Ecotoxicity - Freshwater Algae - Acute Toxicity Data

Sodium carbonate	497-19-8	120 Hr EC50 Nitzschia: 242 mg/L
Sodium percarbonate	15630-89-4	240 Hr EC50 Chlorella emersonii: 70 mg/L

Ecotoxicity - Freshwater Fish - Acute Toxicity Data

Sodium carbonate	497-19-8	96 Hr LC50 Lepomis macrochirus: 300 mg/L [static]; 96 Hr LC50 Pimephales promelas: 310 - 1220 mg/L [static]
Sodium percarbonate	15630-89-4	96 Hr LC50 Pimephales promelas: 70.7 mg/L [static]

Ecotoxicity - Water Flea - Acute Toxicity Data

Sodium carbonate	497-19-8	48 Hr EC50 Daphnia magna: 265 mg/L
Sodium percarbonate	15630-89-4	48 Hr EC50 Daphnia pulex: 4.9 mg/L

Persistence / degradability Not available

Bioaccumulation / accumulation Not available

Mobility in environmental media Not available

Environmental effects Not available

Aquatic toxicity Not available

Partition coefficient Not available

Chemical fate information Not available

13. Disposal Considerations

Disposal instructions Dispose in accordance with all applicable regulations.

Waste from residues / unused products Not available

Contaminated packaging Not available

14. Transport Information

UN/ID N.o. Not applicable

U.S. Department of Transportation (DOT): Classification: Not regulated

Proper shipping name Not applicable

U.S. DOT Hazard Class Not applicable

Subsidiary Risk Not applicable

Packing group Not applicable

DOT RQ (lbs) Not applicable
ERG NO Not applicable

Transportation of Dangerous Goods (TDG - Canada): Classification: Not regulated

Proper shipping name Not applicable

Status Not applicable

Packing group Not applicable

IMDG (Marine Transport): Classification: Not regulated

Proper shipping name	Not applicable
Class	Not applicable
Subsidiary Risk	Not applicable
Packing group	Not applicable
IMDG Page	Not applicable
Marine pollutant	Not applicable
EMS	Not applicable
MFAG	Not applicable
Maximum Quantity	Not applicable

IATA/ICAO (Air): Classification: Not regulated

Proper shipping name	Not applicable
Class	Not applicable
Subsidiary Risk:	Not applicable
Packing group	Not applicable
Maximum Quantity	Not applicable

15. Regulatory Information

Occupational Safety and Health Administration (OSHA)

29 CFR 1910.1200 hazardous chemical	Yes
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US Federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Product Registration: Product is compliant with CPSC regulatory guidelines; a specific registration is not required for this product.

CERCLA (Superfund) reportable quantity

None

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
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Section 302 extremely hazardous substance	No
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Section 311 hazardous chemical	No
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Clean Air Act (CAA)	Not available
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Clean Water Act (CWA)	Not available
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State regulations

See below

U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Subtilisin carlsburg 9014-01-1 Present

U.S. - California - Proposition 65 - Carcinogens List

Titanium oxide 13463-67-7 carcinogen, initial date 9/2/11 (airborne, unbound particles of respirable size)

U.S. - Illinois - Toxic Air Contaminant Carcinogens

Titanium oxide 13463-67-7 IARC 2B Carcinogen

U.S. - Massachusetts - Right To Know List

Alpha-D-Glucopyranoside, 57-50-1 Present (dust)

beta-D-fructofuranosyl

Titanium oxide 13463-67-7 Present

U.S. - Minnesota - Hazardous Substance List

Alpha-D-Glucopyranoside, 57-50-1 Present (dust)

beta-D-fructofuranosyl

Titanium oxide 13463-67-7 Present (dust)

U.S. - New Jersey - Right to Know Hazardous Substance List

Titanium oxide 13463-67-7 sn 1861

U.S. - Pennsylvania - RTK (Right to Know) List

Alpha-D-Glucopyranoside, 57-50-1 Present

beta-D-fructofuranosyl

Titanium oxide 13463-67-7 Present

U.S. - Rhode Island - Hazardous Substance List

Alpha-D-Glucopyranoside, 57-50-1 Toxic

beta-D-fructofuranosyl

Titanium oxide 13463-67-7 Toxic

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes
A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)		

16. Other Information

Disclaimer

This product should only be used as directed on the label and for the purpose intended. To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Further information

FINISH® Quantum® (Original) - 0364746 v1.0
FINISH® Quantum® with Baking Soda - 0356739 v3.0

Issue date

26-Apr-2012

Effective date

15-Apr-2012

Prepared by

Reckitt Benckiser Regulatory Department 800-333-3899

Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.